This volume of studies from nature, in various branches of natural history, the amusement of many pleasant hours of his father George Cumberland – he presents to his Son Sydney, as a proof of his esteem and as an example of vacant hours, not misspent

G Cumberland.

June 28th
1846.

Geo Cumberland was born 27th Novr. 1754.

Died Aug. 8th 1848.

Sydney Cumberland died March 1868.

The entrailes of a Toad, and appearance after being skinned – The heart was small & so covered at the Point with much fat and placed just above the Liver – The Gut was filled with Beetles, nearly entire of the Black kind – The green & yellow part spotted had no contents but was hard like the outer skin of the animal – The Skin was tough – The Flesh white as that of a Frog, and it contained much fat

1.

Little brown or Devon. Scaly Lizard of British Zoology

4.

5.

The entrailes of a Toad, and appearance after being skinned. The heart was small & so covered at the Point with much fat and placed just above the Liver. The Gut was filled with Beetle, nearly entire of the Black kind. The green & yellow part spotted had no contents but was hard like the outer skin of the animal. The Skin was tough. The Flesh white as that of a Frog, and it contained much fat

2.

3.

M. Cuvier's - arrangement of the Genus Crocodile, of the order Sacri, class amphibia after he had read every thing on the subject viz:

Conical Teeth in a single row — a broad fleshy Tongue affixed to the Mouth: a compressed tail carinated and serrated on the upper part Palmated or semipalmated feet — broad and nearly square Scales on the back, belly, and Tail — he divides again into 3 sub genera — viz 1 Alegator (caiman)
2 Crocodiles (
3 Long beaked (gavials) of these ~~three~~ seem to be
the fossil heads hitherto found

6.

4 Claws longer

7.

2.

eyes of Bullock

Mr Bullock, in anything to respect
with the Alligator

8.

An alligator from Jamaica 8 feet long — 36 joints in the Tail
Colonel Dentz's Grove 1811 — It was taken from a Christmas Creek

Eye open
Eye shut with a film

3 Feet

36 joints

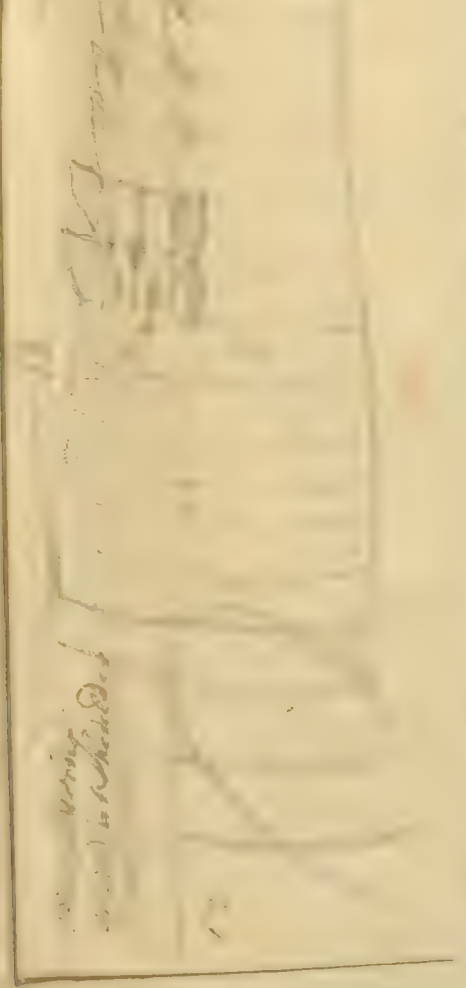
This alligator resembled in most respects that which Mr. Bullock exhibited as a Crocodile
It also has 36 joints in the Tail —

9.

Talpa Gryllo — asparagus beds

10.

I saw this alive in London
in 1798



Parts of Generation of the Garden Snail.

1 [illegible] of a transparent hard substance in form of three Tubes, a Dove

4 The Mouth of the yard capable of extension [illegible] Penis — [illegible]

3 The Penis a full page [illegible]

5 a Species of Clitoris [illegible] at the bottom of the Womb

6 The Vagina nearly opaque

7 [illegible]

a [illegible] Magnified [illegible]

a [illegible] receive the Penis for a long [illegible]

Plate of the [illegible]

[illegible] of Nerves [illegible] the bottom of the Womb

15.

16.

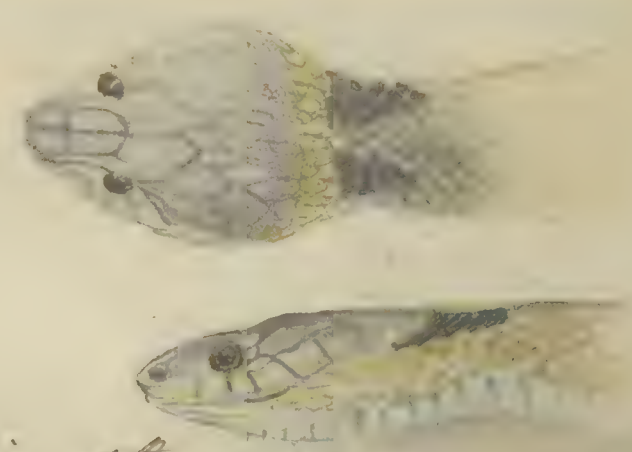
1.

1B.

19.

20.

21.



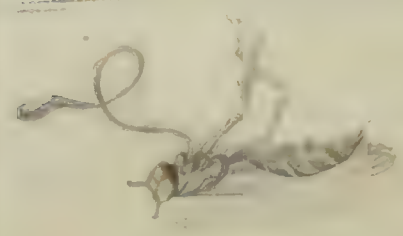
Two views of the
Common Snake of England
head yellow & black.
body &c. green
Black [illegible] No teeth
[illegible] Tongue & bottom [illegible]
[illegible] April 1844. [illegible]

Two photographical Drawings page 18 and 12

22.

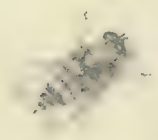
vegetable Fly of Linnaeus

23.



This I drew from Nature
The flower was blue [illegible]

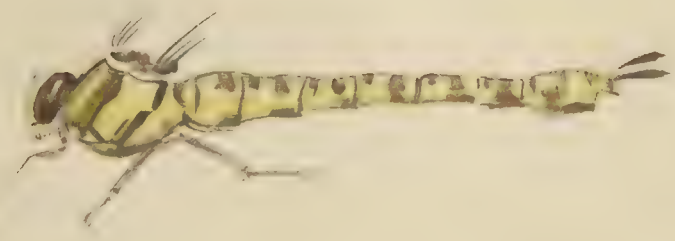
25.



26.

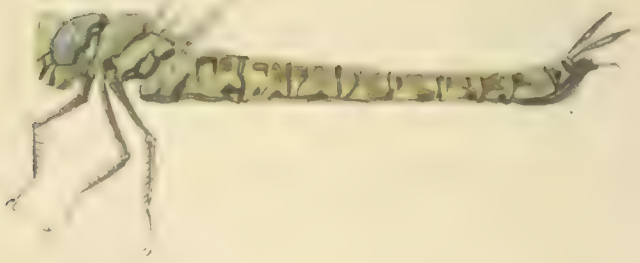
27.

28.



This Tapir is I believe an inhabitant of the lower Egypt — the marshy bog of the Delta — it was shewn by Polito at Bristol 1787 for a South American Hippopotamus! — This was a young one on head been gelt — perfectly tame of the appearance and feel of a fat Boar a grey coloured flesh covered with a thin down of brown hair quite soft and flexible except about the manes. eyes dark & dull coloured but expressive — Proboscis short & flexible — not scarcely able to convey an apple into his mouth, which he proceed with difficulty, he was of the size of what we should call a well fed Bacon — Tail like the Elephant — claws broad & flat. 4 before and three behind. Ears had a white rim round the upper part cheeks grey. — I heard no sound of voice. but a low squeak like a pig — it is said to grow to the length of a Horse and to walk the bottom of the rivers. on the land darkish colour

ostrich's claw.



33

35

34.

36

37

38.

39.

Cancer Pulex. Lin.

Inachus Pulex. Müller

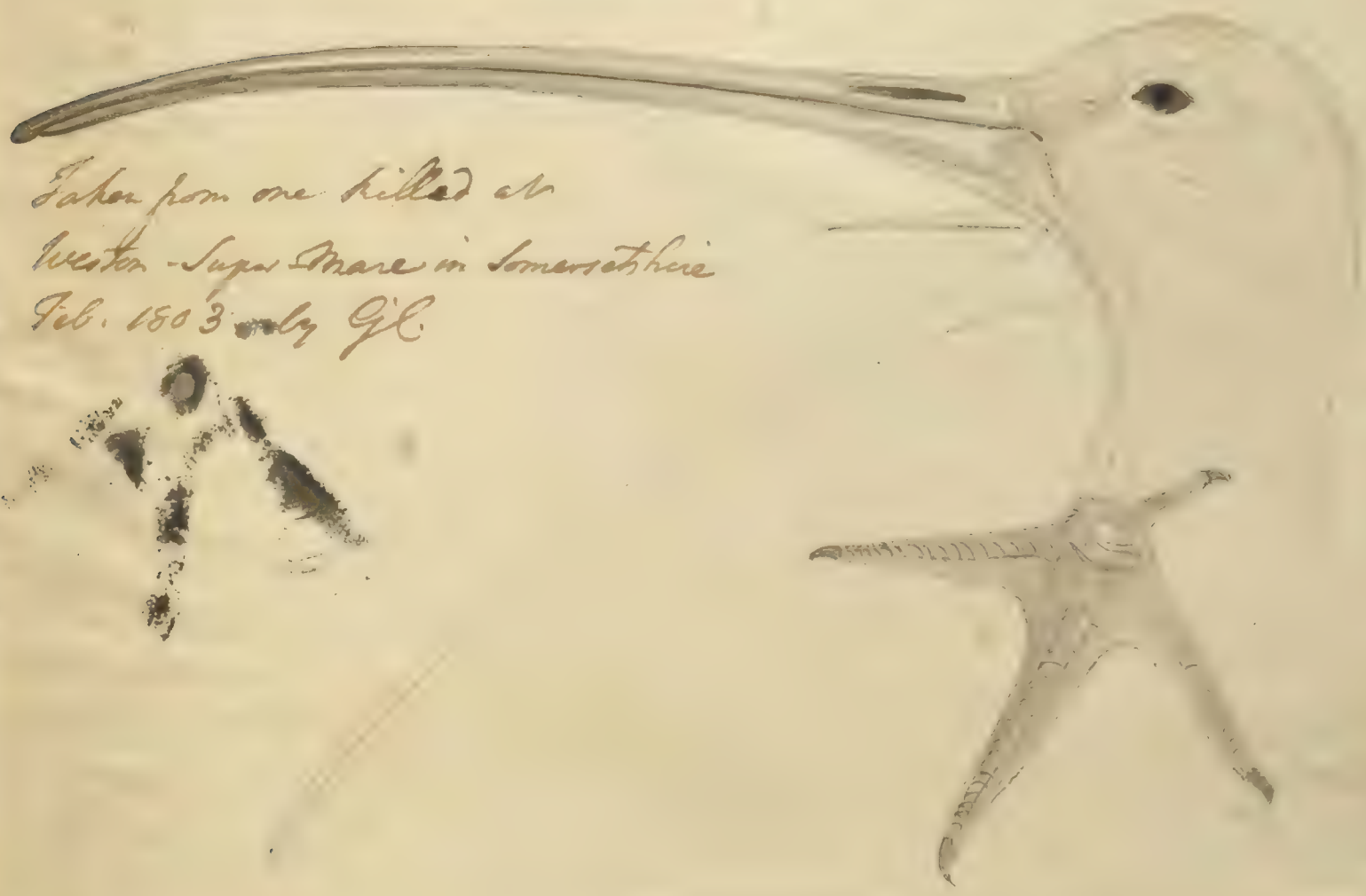
41.

42.

43.

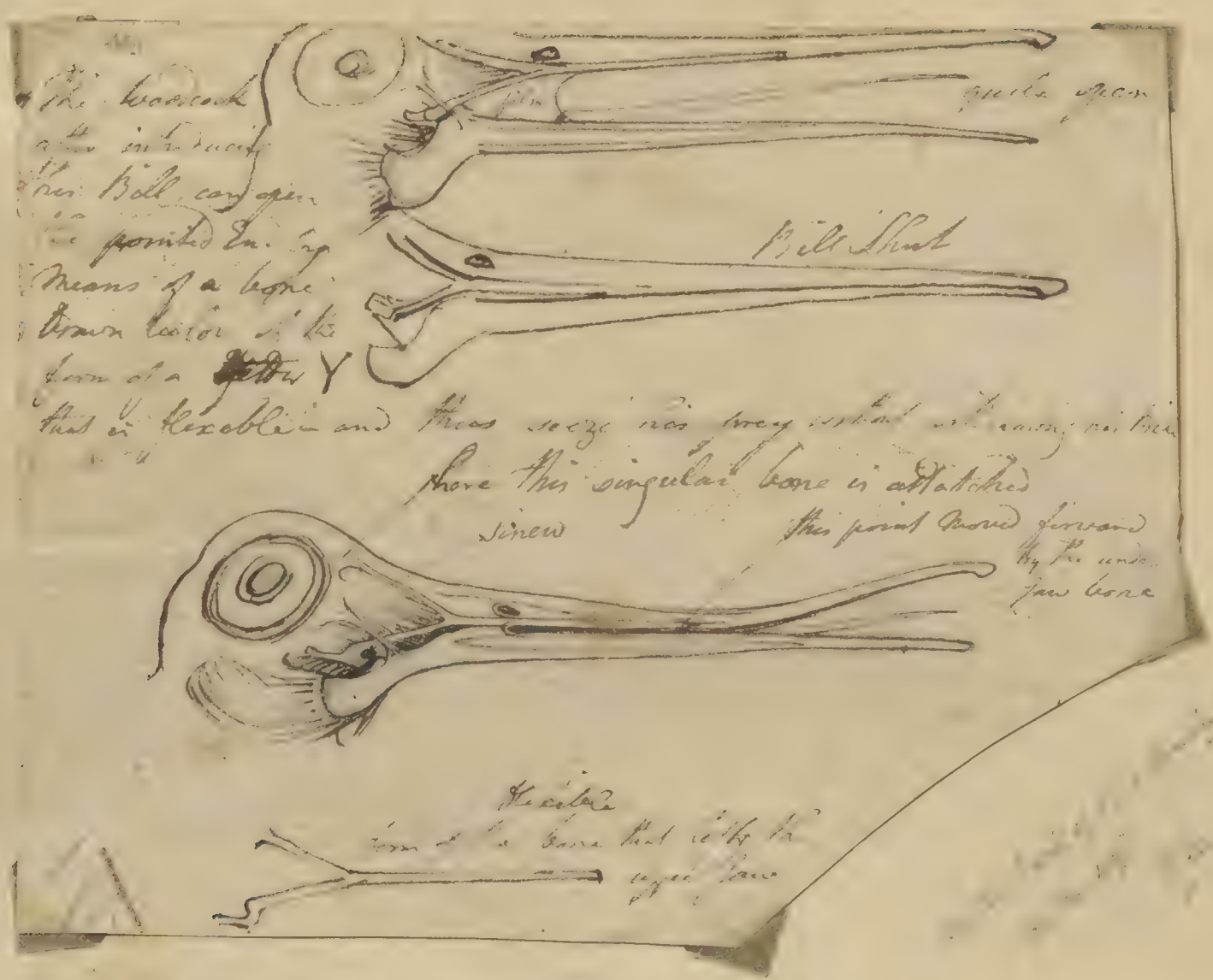
46.

The Curlew — head and neck as well as beak — shewing the beak of its natural size, and consequently the extent to which he can open his Bill, also the length of his tongue and size of the foot —

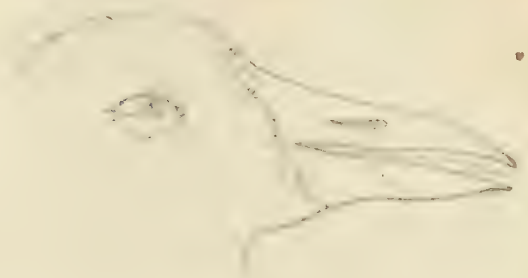


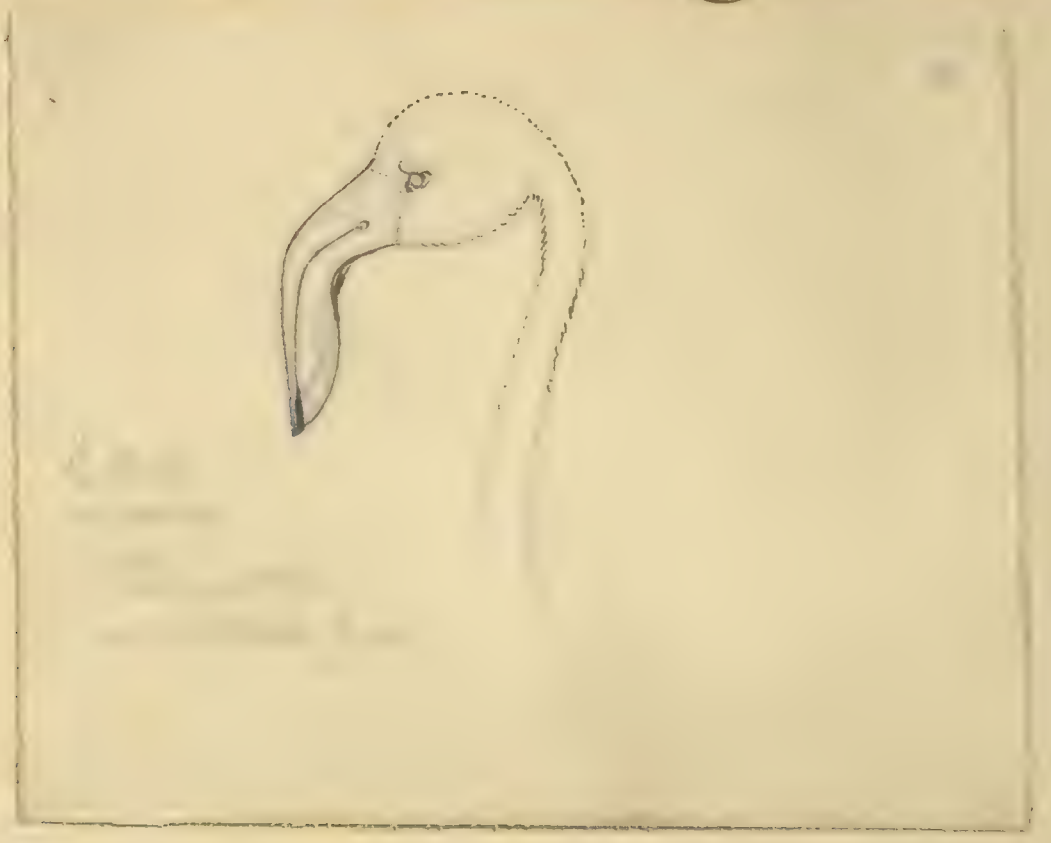
Taken from one killed at
Weston-Super-Mare in Somersetshire
Feb. 1803 by G.L.

One of three house-martins that fell from [illegible] Super Mare 6 Nov. 1800 [illegible] — The upper part of a dark mixture the [illegible] Breast — The lower part [illegible]


Bill Shut
Sinew

Woodcock –





E. M. C.

61.

Horse Shoe Bat.

Tail [illegible] a membrane, somewhat resembling the shape of a horseshoe, covers as long as the head without [illegible] valves — Tail half the length of the body

Vespertilio ferrum equinum Linn.

[illegible] the [illegible]
[illegible] and tragus.
[illegible] leg.
[illegible] tail.

Pallas. Spic. fasc. 1. p. 3. pls.

expanded wings
11 feet.

Horse Shoe Bat.

Ears on the nose a membrane, somewhat resembling a shape a horseshoe, ears as long as the head without [illegible] on knee — tail half the length of the body

Vespertilio ferrum equinum Linn.

Teeth longest though from other earliest teeth incisors canine molar — females each trapezile.

2 on the breast 2 on the hind legs

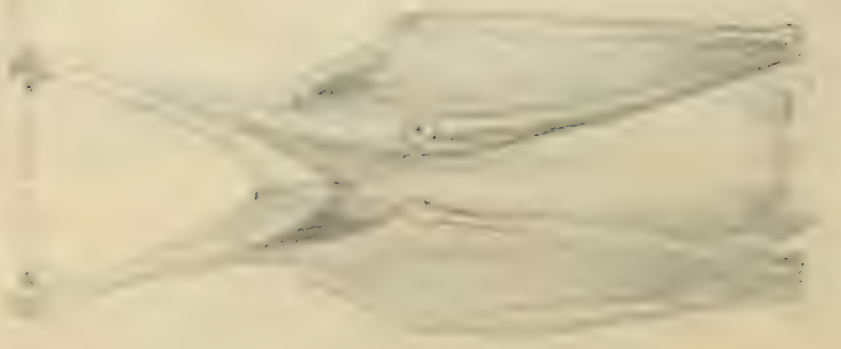
Ears back membrane each possessed tragus.

Hairs fine.

Pennant. 1 p 147 tab 14.

Shaw. Gen Zool. 1 p 131.

Smellenkamp. IV. p 324. Tab. 90. fig 1. & 93. fig.

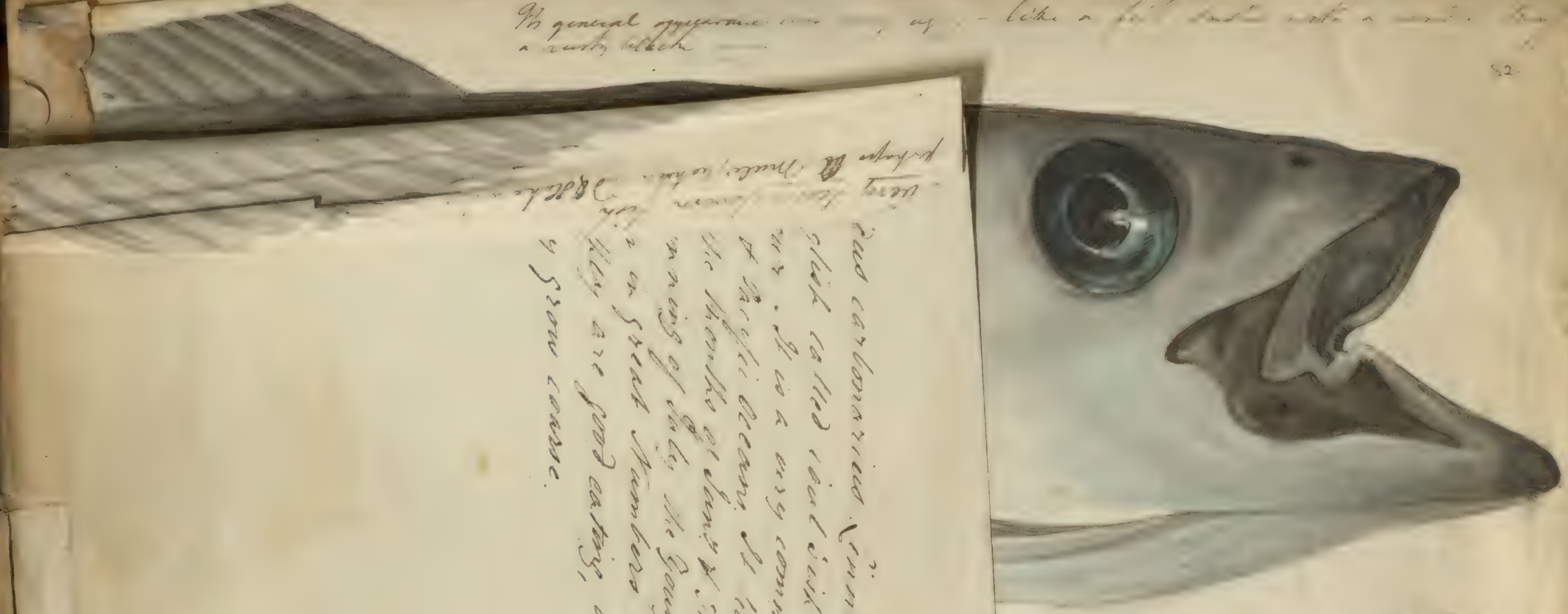



68.

Short Diodon
Taken at Portland June 1813
Fig. 22 from head to tail
D. 15 broad — weighs 20 lb.


81.
8.

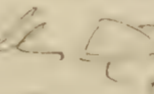
Its general appearance [illegible] [illegible] — like a [illegible] [illegible] [illegible] a [illegible]. [illegible]
a rusty black —



ius carbonarius Linnoi.
glish called Coal Fish on account
ur. It is a very common Fish in the
& Pacific Ocean. It leaves the deep
the Months of Jan.y & Feb.y to spawn
nning of July, the Young Fry begin
e in great Numbers & about
they are good eating, but after that
y grow coarse.

very [illegible] [illegible] fish
perhaps [illegible] Mule; which [illegible] Dolche

he stomach was found one whole Sprat quite fr
[illegible] [illegible] — a small Crab, [illegible] still
full of flesh, viz. 2  1  and a
many Shrimps — abundance [illegible]
[illegible] were consumed [illegible]

Vertebræ — [illegible] [illegible], [illegible] in the [illegible]
[illegible] — [illegible] [illegible] with [illegible]
Scaled very Small  here [illegible]
[illegible] it has but [illegible] resembles the [illegible]
reflections — [illegible] [illegible] teeth, one [illegible]
a very fine row like a file, the upper [illegible]
like a [illegible] comb. [illegible]

Front view of head of Bubalus
or Indian Buffalo

Colds
Tetanus Interment
Dr. Heath
Burning with the Daughters of Brahmins from Jamna
Prog of Nizam-ul-Dowlah Subahdar in Delhi.
Do of Mon Theman chief of Sikhs

Grey Mullet weight 3 lbs 8 oz. Caught 20 July 1850
at Weston-super-Mare, Somersetshire — it has that odd of Gizzard that [illegible] to have [illegible]
in lieu of a particular species.

Its general appearance [illegible] – like a fish [illegible] with a [illegible] a [illegible] tail –

In the stomach were found one whole fish quite fresh, 2 others [illegible] – a small crab, [illegible] of flesh, viz. 2 [illegible] and a [illegible] – abundance [illegible]

A [illegible] – Drawn whole fresh – [illegible] – [illegible] weighed 8 ℔ 3/4. was stated very small [illegible] as the Cobia, which somewhat resembles it, has but [illegible] resembled the window [illegible] is more varied with blue & green reflections – [illegible] very fine rows like a file, the upper lip [illegible] with a [illegible] and shaded like a [illegible] comb. – 4 Gills on each side.

Thousands of worms occupied the intestines of this fish. The liver also had many feed into it [illegible] by the stomach, [illegible] to digest the food – The stomach was a [illegible] – The [illegible] by any means full. – The [illegible] inch here and there extended the whole length of the [illegible] – [illegible] der, a strong integument [illegible] along the [illegible] the [illegible] – The [illegible] bill is [illegible] for [illegible]

54.

55.

56.

The outline [illegible] taken [illegible] Nature.

87.

Mr Howel of Driffield saw a Trout of no great size having hung to [illegible] a Trout of above [illegible] lb. all which the Trout, and after a great time he came up with him in his mouth on the weeds. — this was [illegible] at the coming in of the May Fly in June. when that Fly is gone off at the end of July, they are in full season.
at Driffield also one of a smaller size was found in the stomach of another.

88.

90.

91

92.

Red Mullet taken in the [illegible] of Weston-super-Mare
[illegible] 8th. – Natural size – The head is a little [illegible]
[illegible]

This was drawn from a Mandrill. at Bristol fair 1825
It had all the appearance of Tooth and Vigour, was savage, and had an air of extream melancholy or discontent — even shedding tears — size near 5 feet strength very great — altho a Fierce animal it required 3 Men to hold them when he got loose at Exeter as he lay on netting)

THE WEEPER,

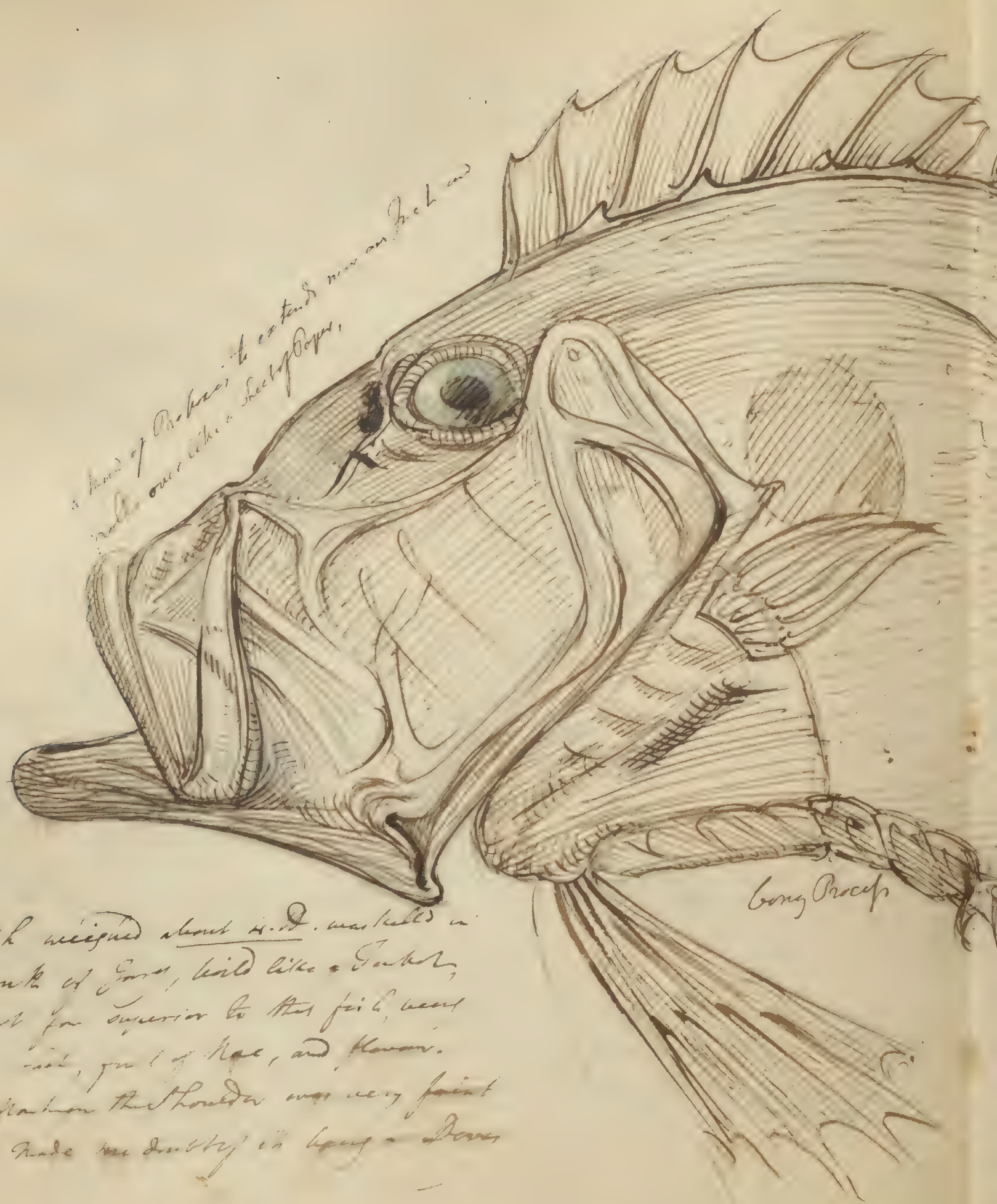
OR, WHITE FACED SAI,

[From the Brazils]

This Animal is of the Monkey tribe, but very rare and scarce; its Face has a greater similarity to the Human race, than the Oran Outangs, he Face is nearly white, the neck, breast, and half way down the fore-legs is covered with White Fur; on the top of the Head is a Black Fur which forms a Cap, the remainder of the body is covered with Black Fur. This Animal also chiefly lives on Wild Fruits and Roots

Weeper at Bristol 1823

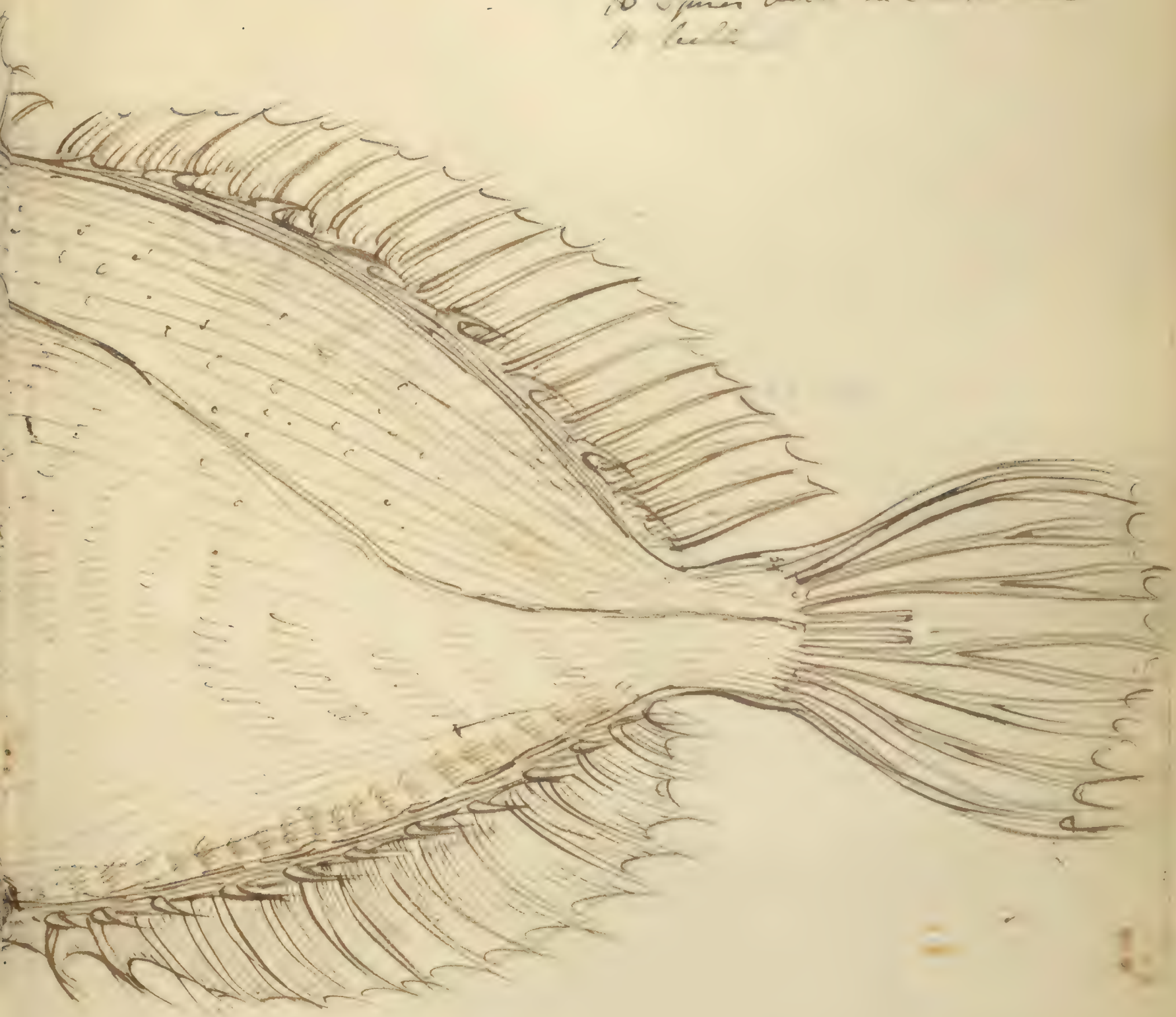
was in continual action — remarkably timid loud in his cries of fear — general voice like the squeaks of a bird — a fine set of teeth perfectly like the human, except two small hanged teeth below — fond of his keeper, and much pleased with the company of a poodle puppy Hands with nails like human and a good shaped thumb — Was satisfied 3 winters — is washed daily — the fur soft and fine has wrinkles on the forehead — nose flat and broad divided a little down the middle — is 3 foot high
Bristol 2 July 1823



This fish weighed about 15 lb. was taken in the channel of Tortugas, held like a Jacket, and eat far superior to that fish, near given, with, juice of Lime, and flavour. The Marrow the Shoulder was very faint tasted rather dirty, in bring a Dover

John Dory.

16 Spines dart a cavity side
of belly



Fish — Nondescript

at the Cape of Good Hope 1801

I saw a Fish of about 12 Inches long, in the possession of the Hottentots or Cattle Feeders — but was not able to procure it — it was the size and shape of a common fish — Scales it had plates, of perfect Ivory — the head and tail of solid Ivory — In the upper jaw only, it had teeth like the fore teeth of a Young child.

— The Plates resembled those of a Armadillo as accurately described — The Plates occupied 3 rows — viz one on the back & two on the belly — The intervals were filled with irregular

divided scales of iron.

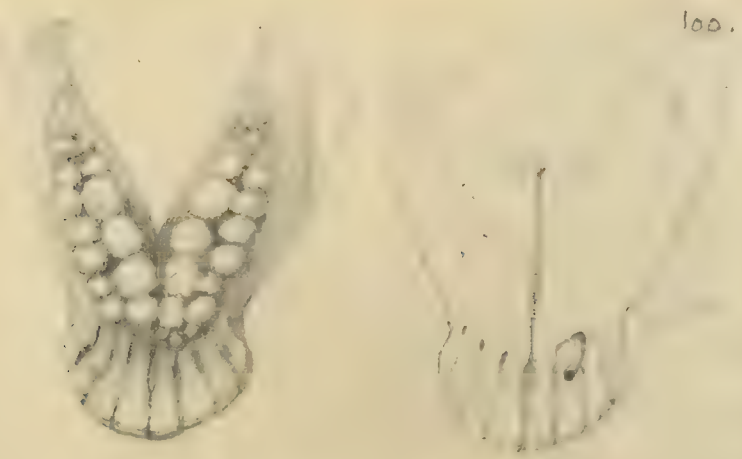
This fish by the Teeth should be young — for it could grow to the size of a whale.

It must be the Lord of the Ocean.

The every fins were solid bony

The plates moderately Porous.

100.



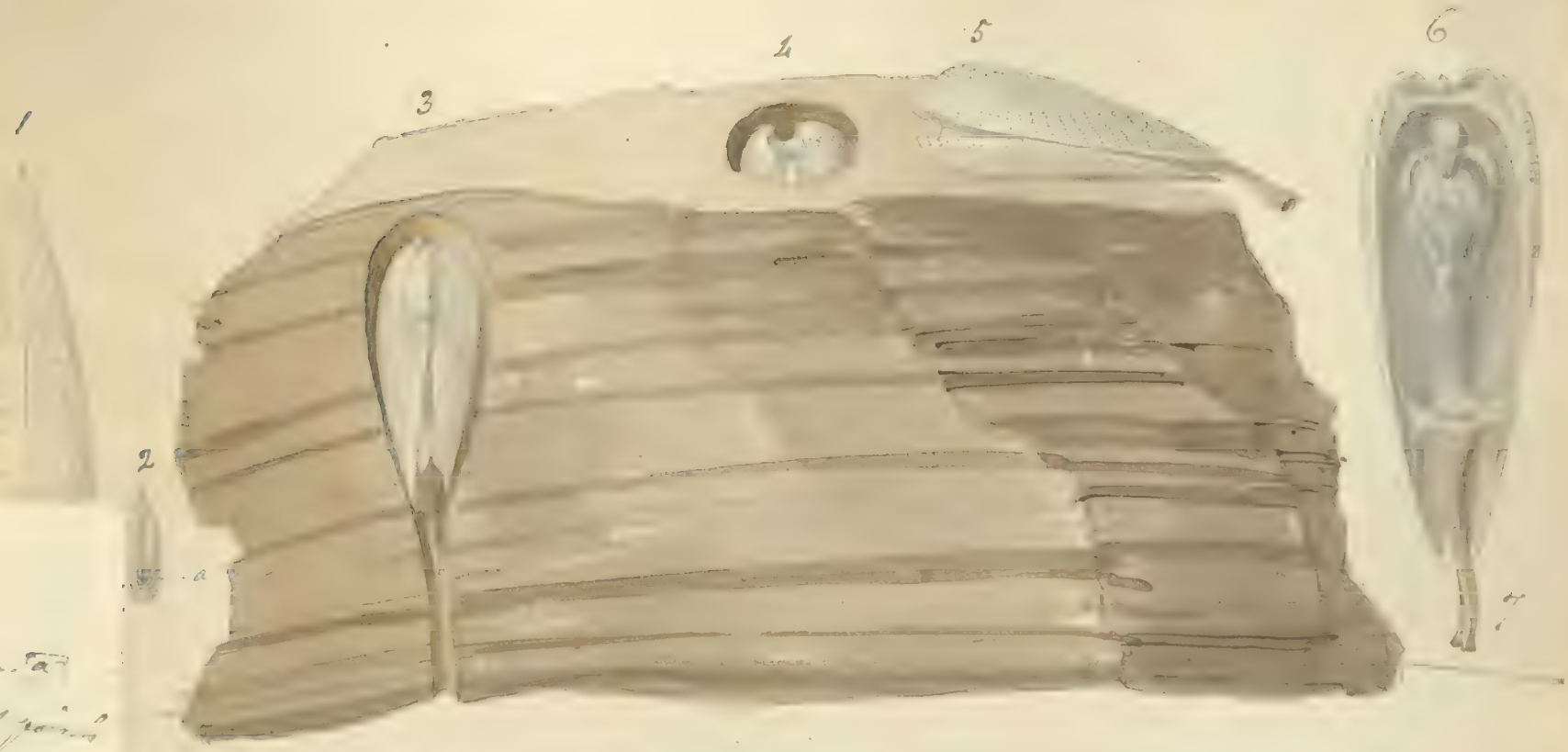
1. The Shell closed at the upper end, seen from be[illegible]
2. The little separate shell which covers the hinge, and is slightly [illegible]
3. The Muscle in its Cell, worn into shape by means of the [illegible] or thorns that cover the whole back of the Shell — the Cell has a [illegible] towards the clay or sand, a perfect [illegible] exactly resembling that of an Elephant, descends in search of food, [illegible] undoubtedly are a species of Centipides, as such were found with them.
4. A Cell opend at the top, with its inhabitant opening the [illegible] pro[illegible] whence it shoots water on being disturbed, and retire[illegible]

[illegible]

probocis distended

5. The Probocis of a dull brown colour, leathery, and wrinkled.

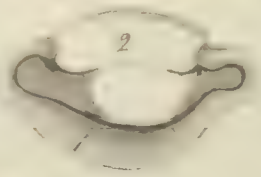
On separating these Masses of leaves and wood, with a Penknife, not only [illegible] are found but fillaments of Sulphur, as in some welsh coa[illegible] bright and Silvery.



singular muscle was found on mine in near the wear a little be
the water on breaking up a peice of those rotten oaks, which appear above the
ds occasionally.— This peice of substance, was not entire wood but only a
of the sub-marine Forest of that coast, and consisted of lamina of bark leaves
, reeds, &c. quite black and rotten — within whose substance laying on the mud
Muscles had their Cells.— The Shell is as thin as paper and quite rotten
ever the oak trees are at low water they abound and some are found more than
e Inches long.— inside of each shell at the large end is a projecting bone.

Jrs of the Bulls Eye

1 Sclerotica
2 Cornea



The Bulls Eye
is reduced to this size and varies to
consider [illegible] thickness
of the shell, quite [illegible] from [illegible]
[illegible] that the cornea [illegible]
[illegible] equal [illegible] and
a different construction from the
[illegible] the sclerotica inasmuch as it appears
[illegible] one body only.

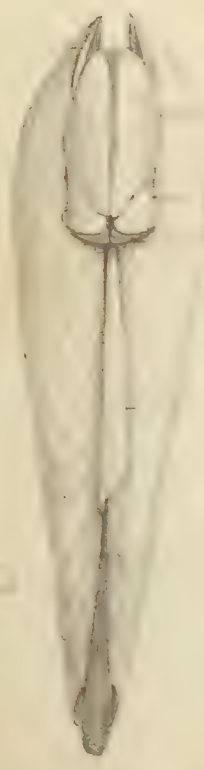
1. The shell closed at the [illegible] end [illegible]
2. The little separate shell which covers the
3. The [illegible] side in the shell worn into a hole
[illegible] towards the [illegible] a small [illegible]
exactly resembling that of an Elephant
[illegible] are a species of [illegible] as
4. The shell opened at the top [illegible]
whence it opened [illegible] or [illegible]
[illegible]
[illegible]
[illegible]
proboscis distended
5. The Proboscis of a dull brown colour, t
[illegible]
6. separating these shapes of leaves and wood,
are found both filliments of [illegible] as
bright and silvery.

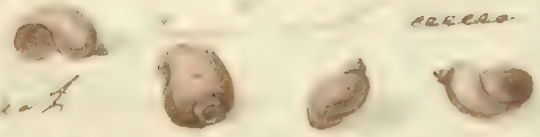
This singular Muscle was found at Minehead near the Wear, a little below [illegible] at low water on breaking up a peice of those rotten oaks, which [illegible] sands occasionally.— This peice of substance, was not entire wood but [illegible] part of the sub-marine Forest of that coast, and consisted of lamina of bark [illegible] of trees, reeds, &c. quite black and rotten — within whose substance laying o[illegible] these Muscles had their Cells.— The Shell is as thin as paper and quite uniform wherever the oak trees are at low water they abound and some are found more than three Inches long.— inside of each shell at the large end is a projecting bone.

Figs of the Bulls Eye

The Bulls [illegible]

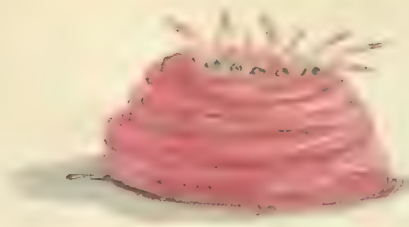
is reduced [illegible] and serves to [illegible] the proportional thickness of the whole outer layer — from hence [illegible] appear that the Cornea is ver[illegible] of an equal thickness, and of a different construction from the Sclerotica inasmuch as it appe[illegible] of one body only.



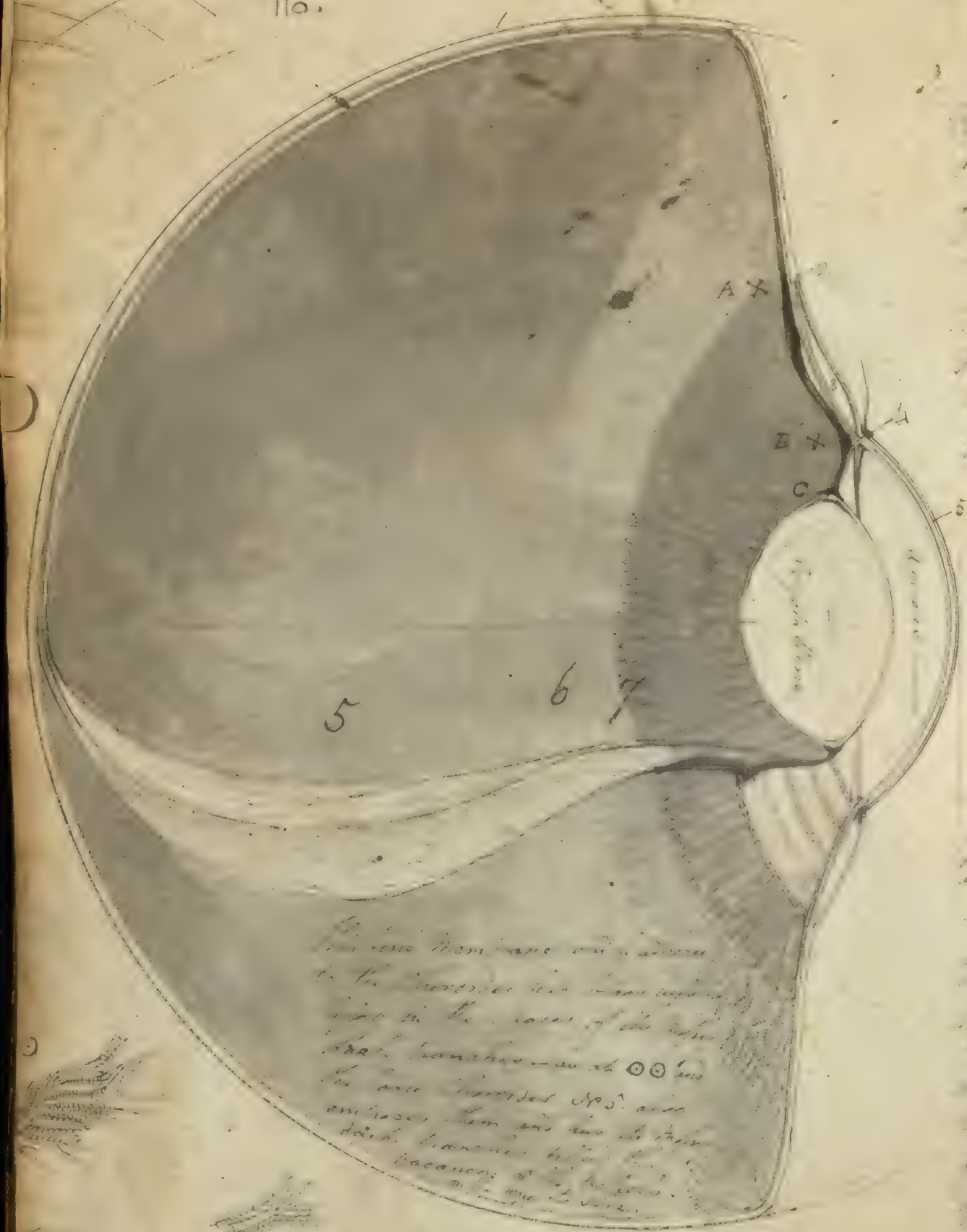


[illegible] at Blue anchor near Menehead saw this fly in the act of laying hundreds of white eggs on the hairs of horses while on the wing, they look like white nits on the eggs of lice — She was meally coloured about the head, with wings half opaque, band with of a brown, had 6 legs 2 horns, the body like a Dove — the tail was intended and withdrawn to lay each egg. The fly was difficult to strike and tenacious of life — while on the wing it much resembled a Bee, and the horse although only touched by a single hair at a time, was sensible of the operation taking place

Examining the loose [illegible] with the sheath we found a speck of the [illegible] kind covering a finger including the nails of a man's [illegible] towards the head where in the [illegible] dark brown and has [illegible] the head [illegible] tenderness [illegible] to length [illegible] doubtless feed on [illegible] of the stone in a circle the centre of which is the tail above which [illegible] excretory organs guarded by bristles — so that undoubtedly this grub feeds — and nevertheless I saw many [illegible] lumps of gelly, that could seem to be these [illegible] —

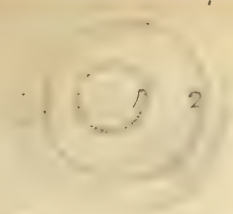


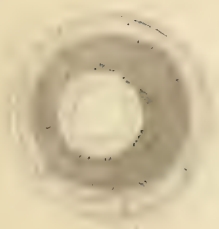
[illegible] their very small worm like [illegible].
Their colours vary, in reds, sometimes approaching a deep purple.

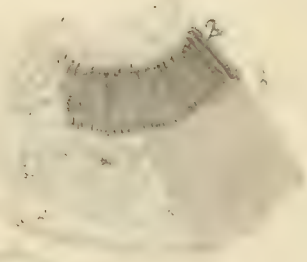


[illegible] 8, and of these [illegible] [illegible] ex [illegible] a very fine coat of 5 — the hom [illegible] [illegible] — [illegible] [illegible] Cornea or [illegible] [illegible] [illegible] 9 [illegible] Sclerotica [illegible] the Choroides & 5 [illegible] [illegible] at A [illegible] B [illegible] Retina [illegible] C by a [illegible] membrane [illegible] the crystalline — being also attached to the root of the Iris which [illegible] a continuation of the Ciliary fibres — and this seems [illegible]

No. 112.







1 [illegible]
2 [illegible]
3 [illegible]
4 [illegible]
5 [illegible]
6 Sclerotica

We have seen distinctly at the same time

in two words with a few main letters then

and, that great from a some 2 yards distance, when

we view the letters so as to intercept the rays in

place, we can distinguish the letters on the page of the

Bible. Perhaps if we wish to examine a learn

the text of any same page, we cannot at the same

time see the Bible on the reverse of the

same page — so that whenever we can see a great

object, we can only examine a very small one

we do Bennet in this case, that it is not possible

to see the whole of a very long word distinctly in

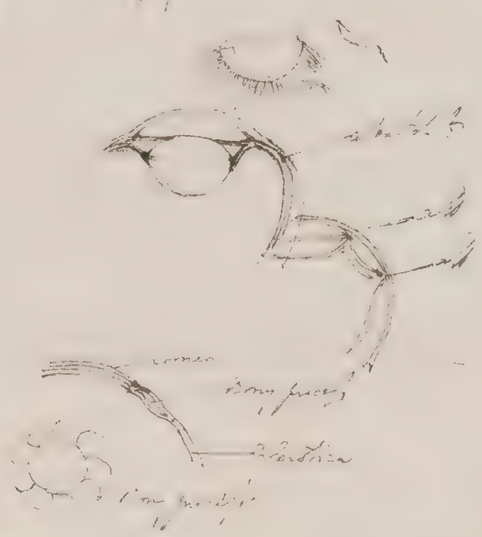
front we are reading, which we see clearly the letters

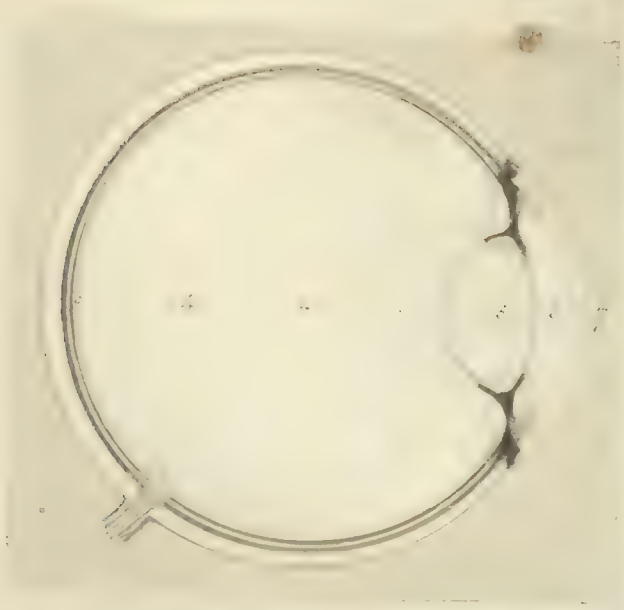
before and behind it —

If we are reflection is only on Bennet object

the easily made of Bees dense in by a Ball of

and a Lantern of stone

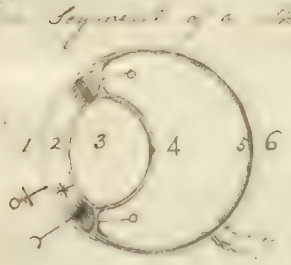

cornea
iris
pupil
sclerotica

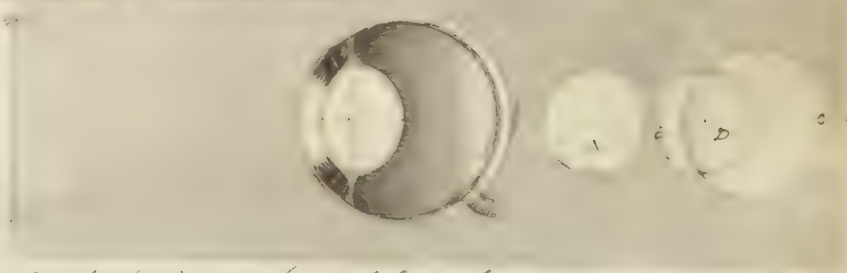


Section of the Eye

1. Sclerotica
2 Retina a bright blue coat between 2 dark ones
3 Membrane that contains the Blood vessels, is transparent, lies on the Retina and is partly fluid.
The part that covers the Optic Nerve from the Centre of which the blood vessels spread in form like a Star
4 Vitreous humour in all this space
5 Crystalline humour consists of coats like an Onion, more and more dense as they approach the centre as to what is called its Nucleus it seems to be only the outer pellicle
6 Aqueous humour.
7 Cornea consisting of three coats as is visible on its being boiled; from whence it is evident that it is composed of different substances and as the form not a Meniscus but a convexo-convex like a watch glass so that the two surfaces seem a single one of a double parabolic convexity.

Segment of a human eye from actual measurement





1 Cornea or jimmy capsule.
2 Aqueous humour
3 Crystalline
4 Vitreous humour
5 Retina
6 Sclerotica
7 Optic nerve which enters the vitreous humour and is connected with the retina

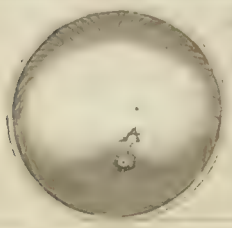
A – front view of the Crystalline lens.
B.C. Two Circles which d[illegible]

D. profile of the Crystalline substance, showing the [illegible]

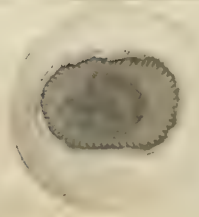
Cornea * Horny Capsule connected with the Sclerotica [illegible] fills the Chamber no 2. which flows out on that transparent horny [illegible] perforated 1

* [illegible] and by the aid of the Circular ligament [illegible] the aqueous and vitreous humours

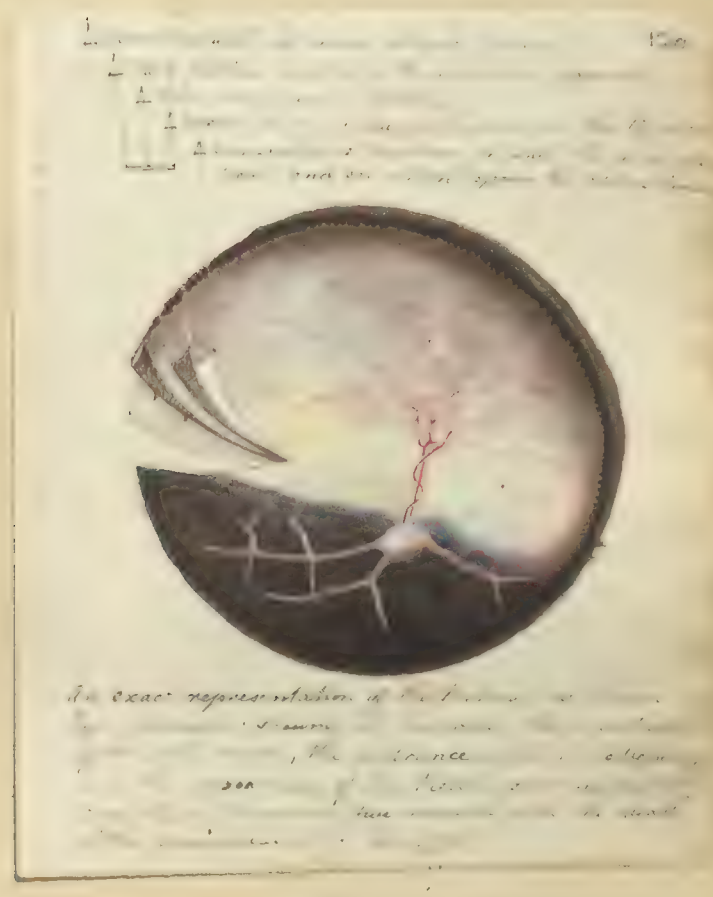
† Iris [illegible]

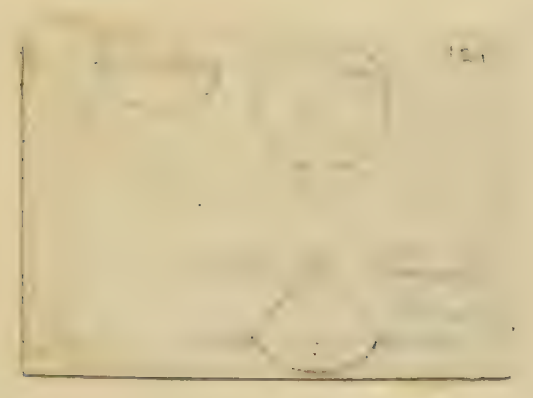


A [illegible]

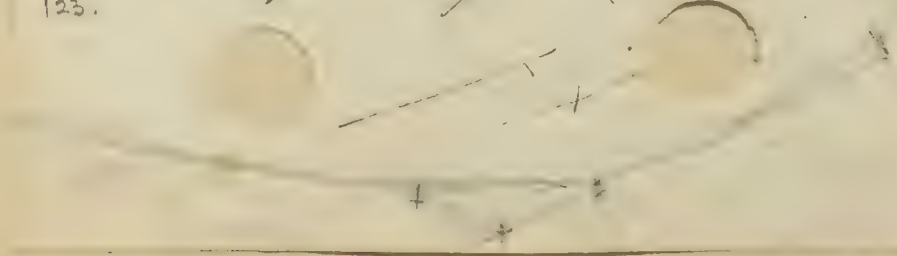


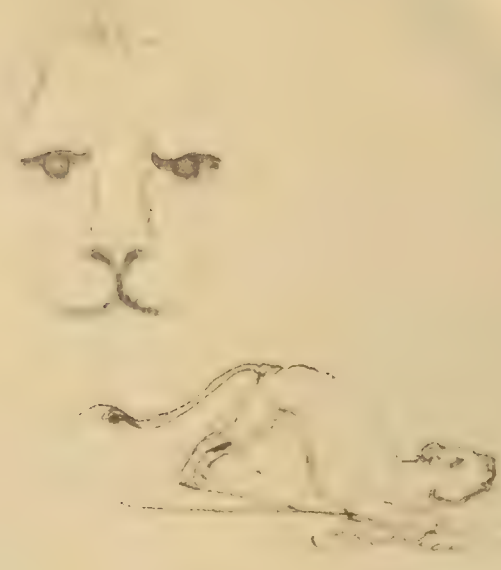
have no Glue, just cooled, and compounded of thin laminous particles like an Onion which may be seen when boiled – the vitreous like jelly





To shew the difference of Ones, Candles & Moe





Young Lion Senegal, at Bristol July. 1809

The Bactrian Camel from the Life – at Bristol Feb.y 1823.

128.

Llama of Peru.

129

the tail of the Mandrill is
12 Inches old — possessing a native
of India — so many of the young ones
have been brought to Calcutta.
has lost one of the singular
blues and reds — the coat olive
green with shades of black
Pearly white — general color
of the face black except in
the face Proper, the lips, the
cheekbones, & the Genital Parts
where the shades are lost the
orange coat comes in all the
directions and the inner
after the dangers and being
the Teeth is over, but
often die from the close
confinement of the
Carriages in which they
are then closed and
cold of the days.

20 an inch at the top

Brazil Jan. Esq. 1806

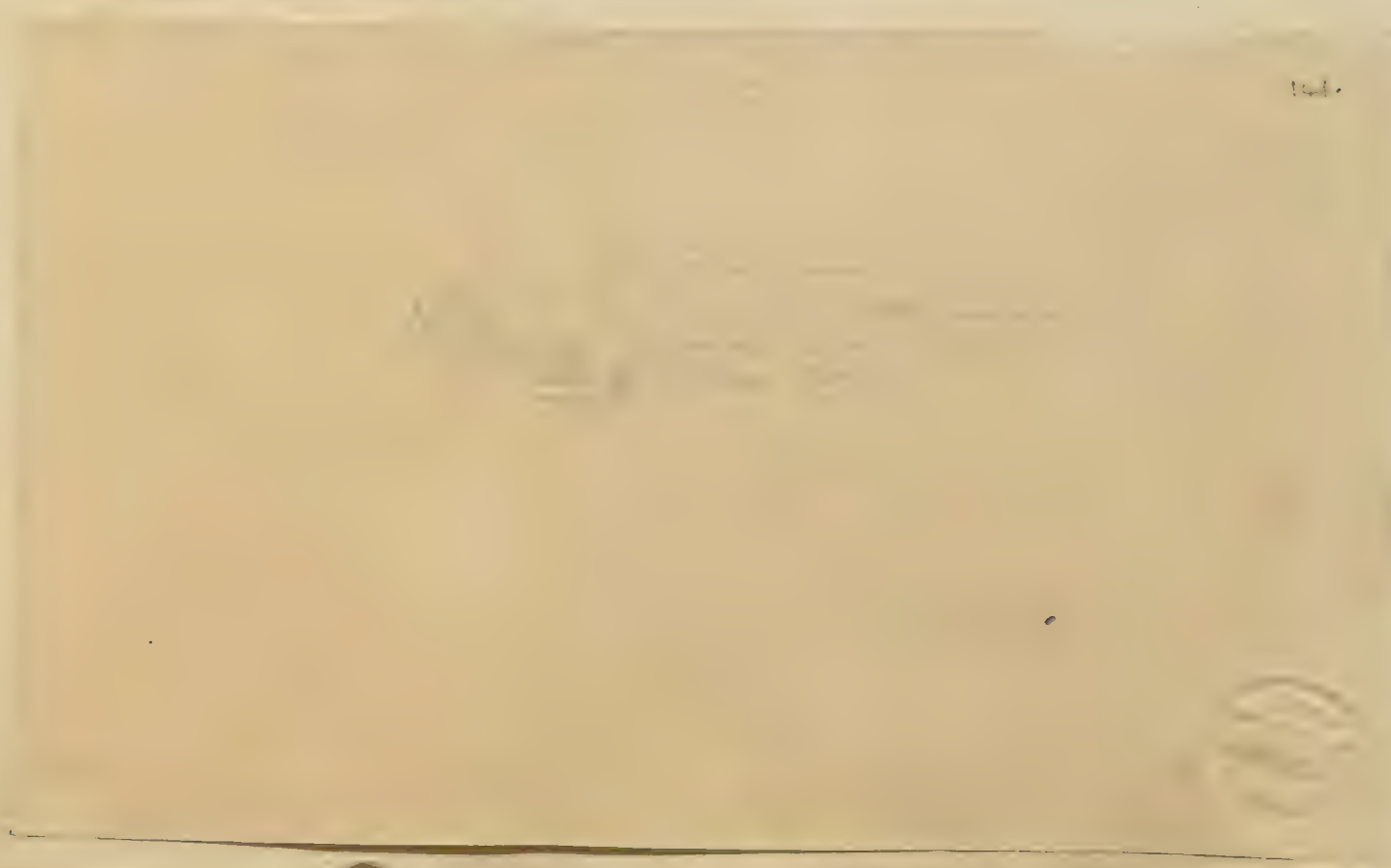
138.

Lion Monkey about 2 feet when sitting

Pigmaea
Jaga.


139.


140.


141.

Bristol 22 Nov. 1818. He delighted in a stone drain pipe below — and was delighted to be kept always wet — seemed desired, there, and was in constant Motion

142.

L. Pote Delin.

143.

Royal Tyger from the Sundarbans &c. 4 yrs old Eyes olive green Tan colour darkest at the back
he was very gentle — and 16 ℔ of beef daily.

Set fair Walter 1816.


Africa Cape Town Black Rhinoceros (Barrow)

Mr Lucas Spanish Ram a Soomesea, from Mr Brooks [illegible]

This animal the Coiendo — is covered with small quills like the hedgehog. muzzle brownish red, black bristly whiskers. a broad tail at the bottom. The top wormlike and bare, with this he holds a branch. — is heavy but good tempered broad muzzle like a Rat the teeth — smells offensively.

1 Side view of [illegible] a little thin on [illegible] black or dark coloured limestone

160.

2 front view of it

M. Buckeridge del. [illegible]

3. [illegible] Tail of an [illegible] [illegible] a little [illegible]

161.

162.

163.

166.

167.

168.

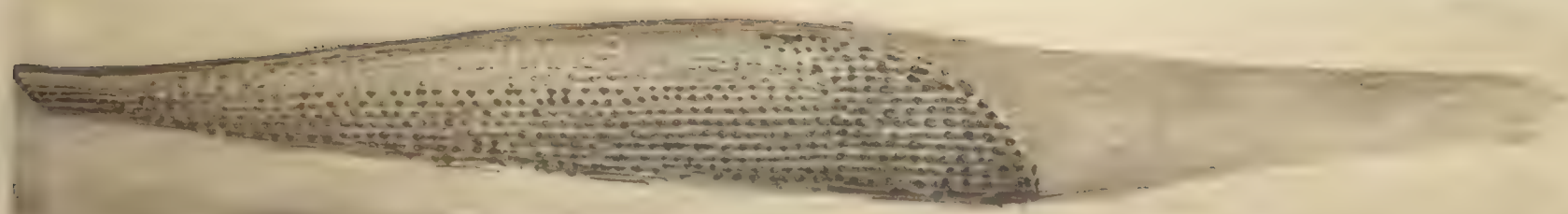
169.


172.


173.

C. 1°

Pygocrinus polyphemus of Lyon

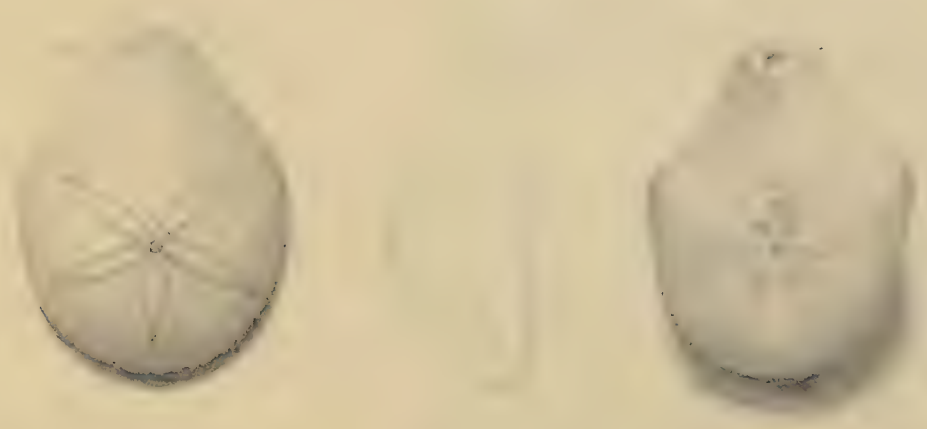



180

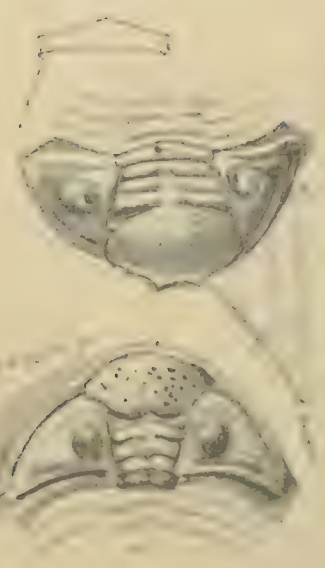

182.
oval Mamellon
with Spines
& Rayes
Surgeon
Chalk & Gilt Shell made
by Mr Waterguil by a
Frenchman & sold to
him at a high price
now at Surgeons college.

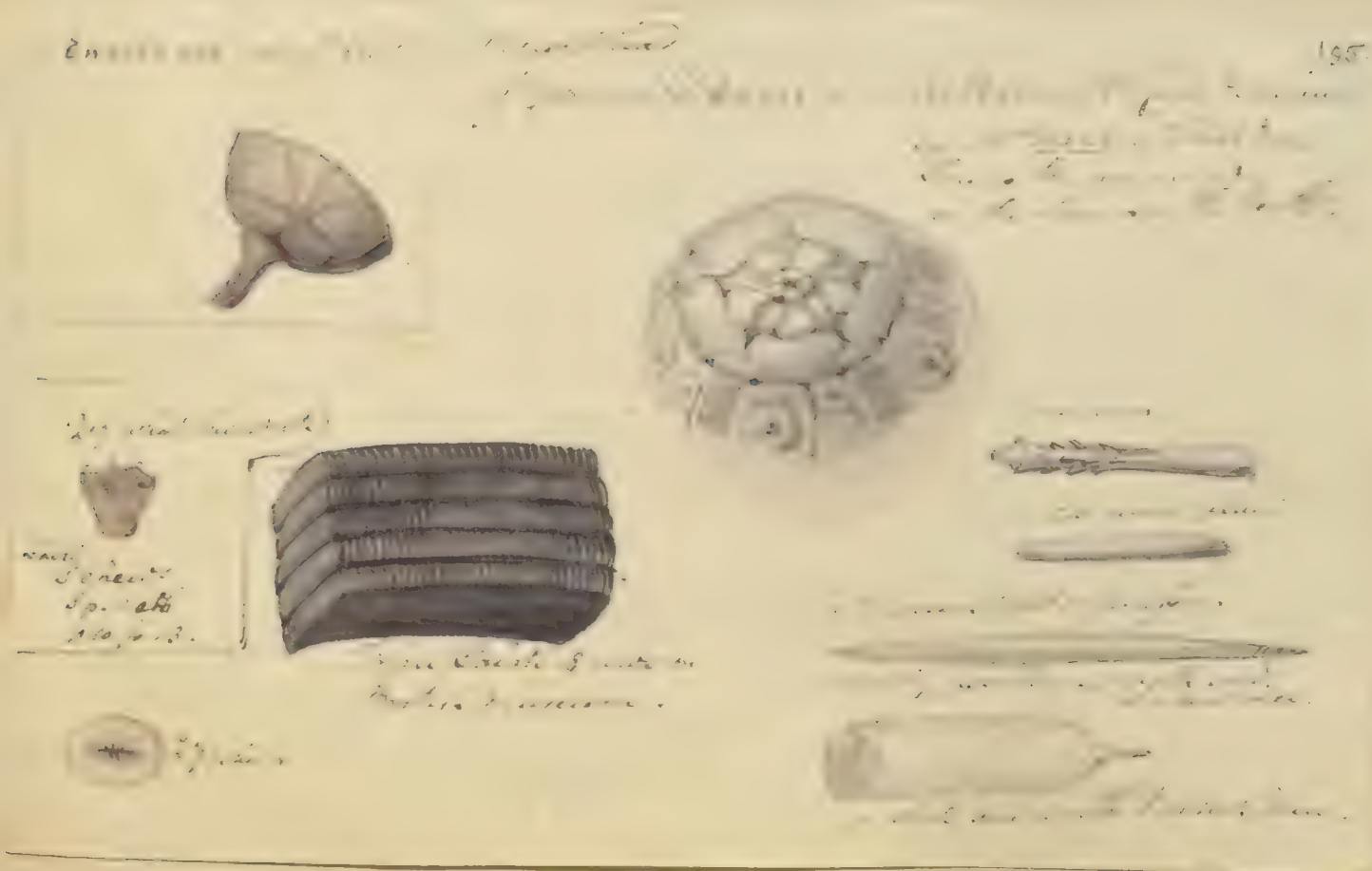
Belemnite from Charmouth — in a Nucleus of Ichthyosaurus Paddle Bone —

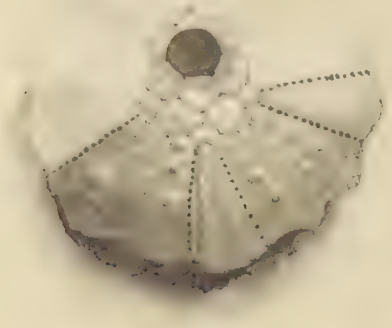
Mr. Isaac Cheverridge

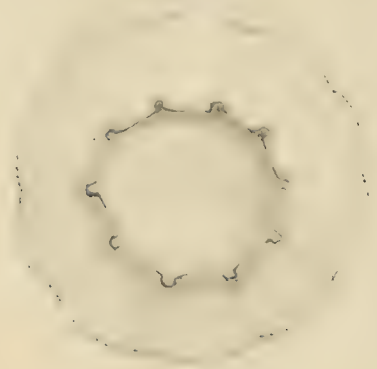


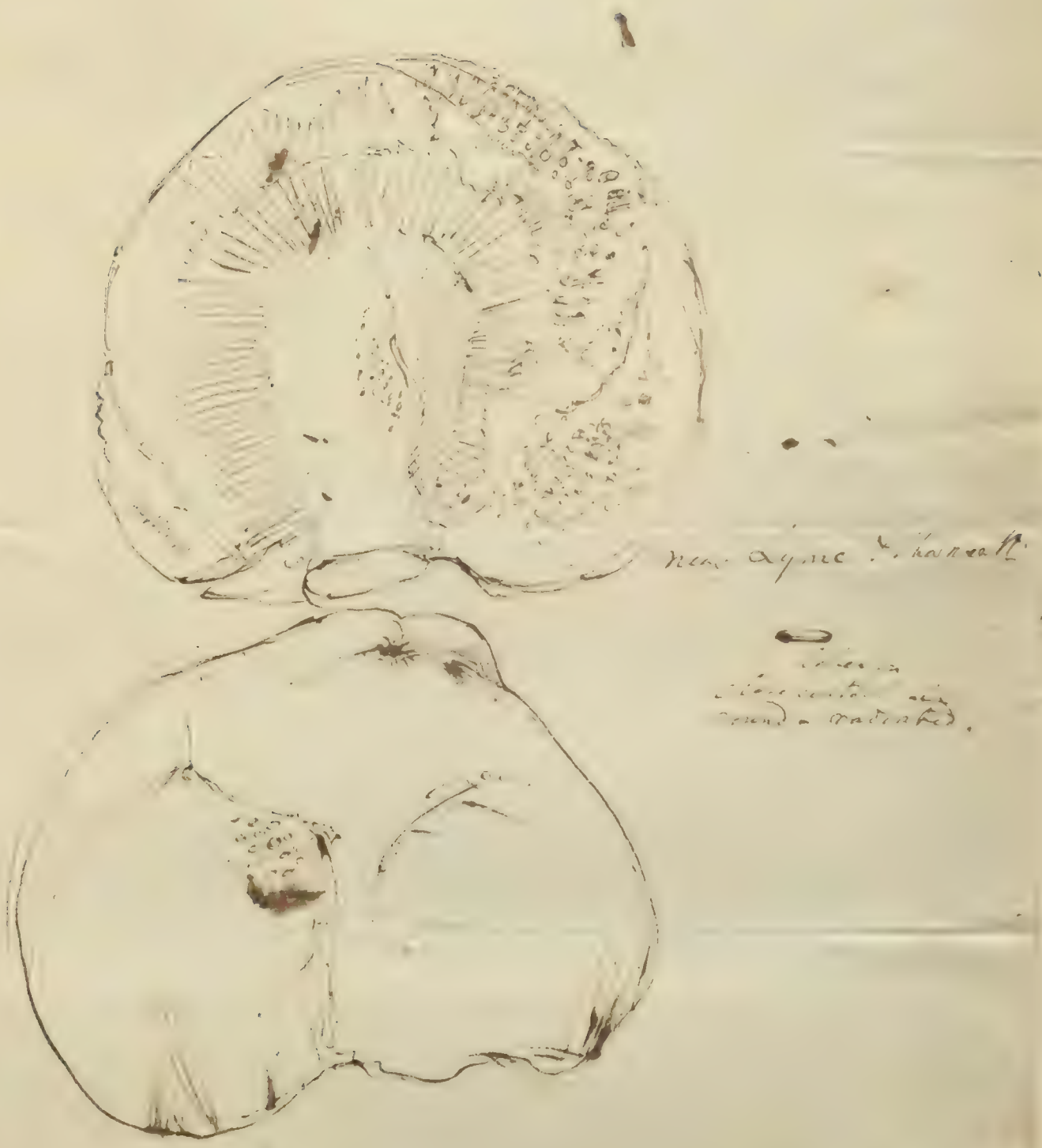
193.



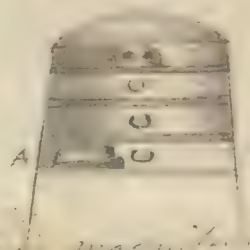






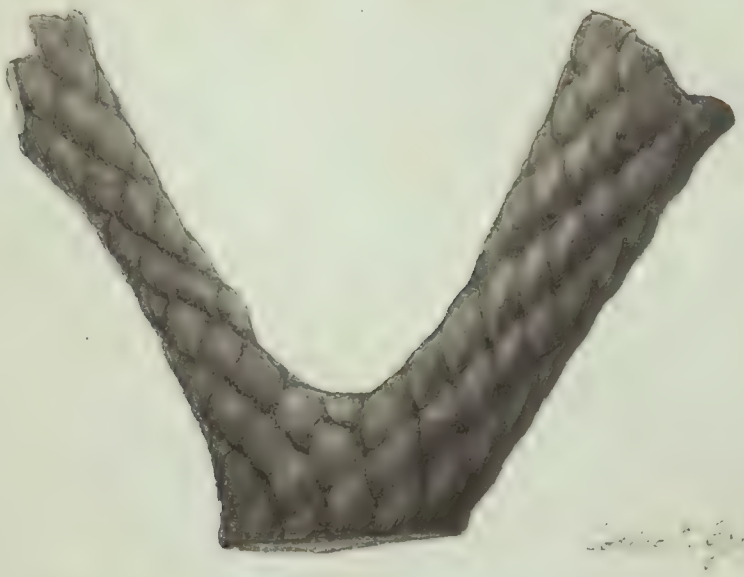


200.

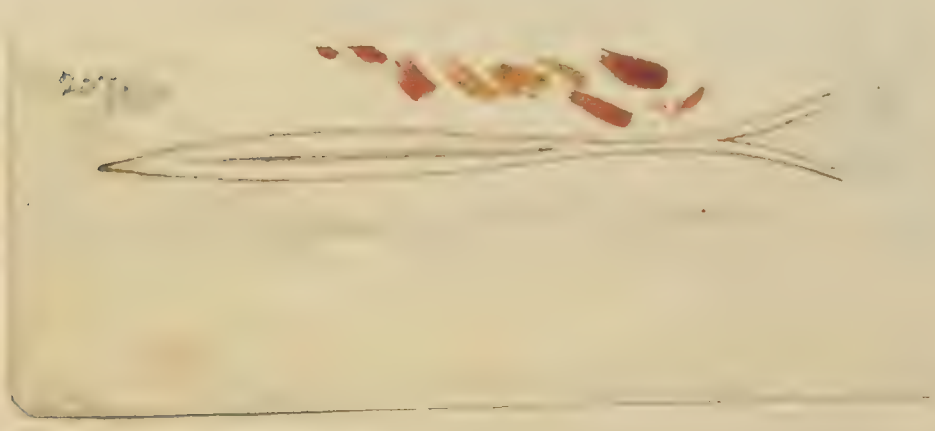

A
C
C
C

[illegible] of [illegible] found [illegible]
[illegible] Three Times [illegible]
[illegible] Collection [illegible] a person [illegible] came to [illegible]

Downing in a cherty sandstone [illegible]



[illegible] on the Stone on which it lay — both the branch and the matrix were covered with pure coal — the thickness of the coal. The branch is flattened and quite [illegible]



from Downing Quarry, near the Edge
in White Quartose Sandstone
Fig. Page.

from a Tree laying Lengthways
on the surface of the Ground in situ.


213.

217.

218.

222.

Gold Crystallized in Cubic Nuggets

Pudding Stone with Ferruginous Cement

Conglomerate mass containing Gold & Sometimes diamonds called when loose cascalho [illegible] in the beds of Rivers lying on the rocks [illegible]

washed for by 5000 negroes at Mandango on the river Jigotonhonha in Cerro di Frio

a Vegaco was found

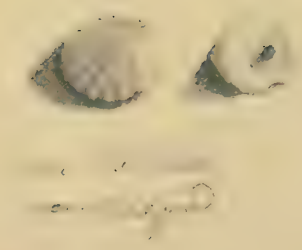
a Primitive Crystal of a Diamond a regular Octaëdron from whence all other forms may be derived

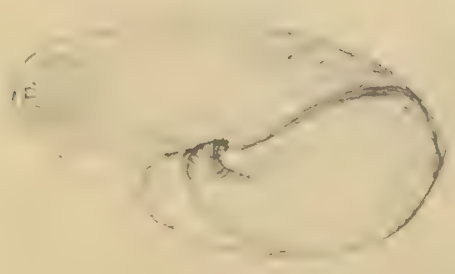
one weighing 17 Carats of this form in the Prince of Brazil's possession.

also Dark Blue green & Yellow colour in Crystals

Twelve grains of one was found of the Prince nuggets by some Smugglers in the rivulet Abrete north a few leagues of [illegible]

[illegible]






229.


230.

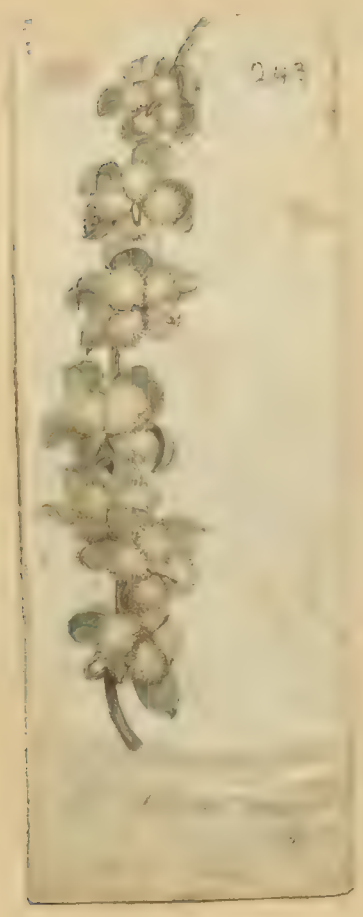
232.


Rus
Canada
236.


237.


Datura Arborea


E del.



Water Newt

Water newt. drawn at Weston-super-Mare. 6 Oct. 1862

4 in. 12 from head to tail — four legs. [illegible]

[illegible] from [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible] [illegible] 1 in. 8/10

[illegible] [illegible] 1 in 3/10 — Length of tail from tip 2 in. 11/10

Thickness of the body 12 lines, near the [illegible]

[illegible] guarded below the tail by [illegible] [illegible] [illegible]

~~Cuticle~~ Cylindrical membrane extremely [illegible] & [illegible]

[illegible] glass. — Fixed 6/10 of an inch long. Longest toe 3/10.

[illegible] on the back about a 10th of an inch high & pointed

[illegible] from the body. 8/10th of an inch

[illegible] in [illegible] like a tooth —

Colour upper parts. Olive dark. — with a stripe along the

[illegible] side of the [illegible] [illegible] [illegible] [illegible] [illegible] into [illegible]

[illegible] blue over the body — and ending with a point [illegible]

[illegible] range of the belly

[illegible] range [illegible] [illegible] [illegible] the edges like a [illegible]

[illegible] large [illegible] spots [illegible] to [illegible]; not deep [illegible]

[illegible] the belly there are no spots, all is deep

[illegible] orange.

The under surface of the rear is marbled with [illegible] a

[illegible] [illegible] [illegible] a ground brown dotted with minute dots

yellow [illegible].

From the belly to the back fore, commences [illegible] —

Meteoro Sem nitro
1 Fam c 12 ringe
2 Fam 32 balls
3 Fam 41 balls
Internal rays 3
External rays 4.

250.

Humboldt Researches Vol. 1. publd 1814.

Pyramid of Cholula in Mexico a mound of Earth — a Teocallis or House of the Gods — Monasteries — with sides in the direction of the Meridian. — and like the Temple of Baal Berith. built by Abimelech was a strong Place — on the Top of which were the Colossal Gods — & where the sacred fire was kept. erected probably in 648 of the vulgar Era. by the Toltecks — Was was dedicated to the God of war & built by the Aztecks 6 yrs. before the discovery of Columbus.

The Plain is called the Path of the Dead. Here other things were
entombed in chambers and. The Valley of Mexico is the Plain of Mico
are & dedicated to the Sun & Moon. Where surrounded by several hund
of smaller former sheets from North to South. Yearly overflow.
The largest is larger than the Sarbheza in Egypt.

The of cholula, is the largest known, goes by the name
of the Mountain Made by Man, it has 120 steps; its base is two
as broad as first of Cheops. but is largest not more than half
of the ceremonies. They were very nearly the same height but the
broader base sometimes.

The Pyramid of Papantla - which has 7 Stories is more
laborious than any Monument of the kind &c covered with ~~Hieroglyp~~
Hieroglyphical Sculpture. It stands not far
Vera Cruz. situated in a thick forest called Papiro or Descent of
the Indians. Found the Gulph of Mexico - Was a Temple
Collection.

Brachiopoda. Magnesian Limestone.
Ashbyacus Zonatus

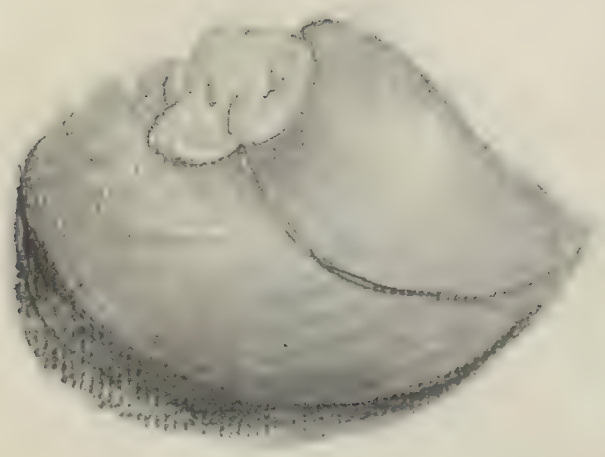


Fig. 1. Of the natural size.
[illegible] a shell, [illegible]
[illegible] again in exactly [illegible] in the [illegible]
[illegible] the [illegible] of the [illegible]
[illegible] the corners of the [illegible]
[illegible] of the [illegible]


5.
Bromley
Aug 1814
Adly

269.

Orchis. bifolia.
Butterfly Orchis
May and June. 1814

24 inc: 1/2.

25 inc 1/2.

as 5.5 inc

to the alloy of the last joint 2 inc 1/2

middle 3 joints / outermost 4 joints

18 2 inc long 18 2 in long

the spot with a cavity in contour on - ground of Gamboge.

wing below 1 inc 3/4

barred at bright orange on

and under wing the underside along the backs of both wings

white yellow irregular on the inner longest feathers.

1/2 each.

5. Second joint of the last 1 1/2 inches

6. middle toe 1 1/2 lines

From point of the beak to the point of the claw when distended in
from the wedge to the tip of the wing when distended in
so that from tip to tip the body being 4 inc thick
length of the bill from the angle of the jaw
length of the tarsus 3 inc
outmost claw 2
innermost claw 2
hind claw 2 inc long
[illegible] 4 inc 2 long
[illegible] 3 inc 4 to 3/8 yellow. the lower mandible
[illegible] the point of the beak — breast [illegible]
[illegible] grey — surrounded by pale lemon colour — [illegible]
body [illegible] white — except the back which [illegible]
[illegible] 12 tail feathers [illegible]
Each wing under has 28 feathers — 1 foot from [illegible]
when flying the legs extend back [illegible] the air in the [illegible]


178.


179.

280.


382.


245.


upper Dolomitic Conglomerate
lower old red sandstone
joining Inced Park left bank of the avon


169.


Dolomite
290.

Drawings Nos. 293-310 in folder at end of book.

[illegible] 29/10/1920.

Drawings Nos. 293-310
in this folder.

H. Hu
20/12/1932.